

Wastewater Management for Medical Marijuana Facilities

Missouri's Clean Water Law requires a permit from the Missouri Department of Natural Resources for the discharge of industrial or commercial wastewater to "waters of the state," the definition of which includes surface water and groundwater. The department also issues permits for land application of wastewater from certain domestic, industrial, and agricultural facilities. Department permits specify terms and conditions that facilities are required to follow.

The following questions will help you determine if your facility requires a wastewater permit.

Will your facility:

- Generate process wastewater? This includes any water that, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product.
- Discharge wastewater to a permitted wastewater treatment facility (sanitary sewer)?
- Discharge wastewater directly to surface water?
- Store wastewater in a basin before discharging to waters of the state?
- Land apply its wastewater?

PERMITTING OPTIONS

Wastewater Treatment Facility (WWTF) or Publicly Owned Treatment Works (POTW)

If discharging to a WWTF or POTW, you may connect directly to the sewer collection system. You also may collect the wastewater in a tank and transport it to a WWTF or POTW for disposal. You must receive prior approval from the disposal facility before discharging to a WWTF or POTW. This is the preferred option for facilities that have wastewater associated with cleaning, rinsing, THC extraction, hydroponic irrigation, and manufacturing edible products.



Discharge to Surface Water

Prior to discharging to waters of the state, an anti-degradation review must be conducted by the department's wastewater engineering unit (required for all new or expanding dischargers). This review analyzes the new discharge's impact on the receiving waters. You also must obtain a Missouri State Operating Permit to discharge, which will establish appropriate discharge and operational requirements.

If you are building an earthen basin or lagoon for holding or pretreating wastewater, a construction permit may be required (Form MO 780-2189). If required, construction permit applications must be submitted 60 days before construction begins and must conform to the requirements listed in 10 CSR 20-6.010(5)(G).

Forms Needed for Discharge to Surface Water and Forms Needed for Land Application

Form A MO 780-1479 – Application for Nondomestic Permit

Form C MO 780-1514 – Application for Discharge Permit – Manufacturing, Commercial, Mining, and Silviculture Operations

Form MO 780-2025 – Anti-Degradation Review / Summary Request

Form MO 780-2189 – Application for Construction Permit – Wastewater Treatment Facility (only if constructing an earthen basin)



Land Application/Spray Irrigation

A no-discharge permit for land application may be required for a facility where process wastes are land applied or stored for subsequent land application, including land treatment basins. For greenhouses, you may be exempt from permitting requirements when applying agrichemical rinsates and any spilled or recovered fertilizers and pesticides on agricultural fields at rates in accordance with product labeling. To apply for land application, you must submit forms A, C, I, and MO 780-2189 to the department.

If you are building an earthen basin or lagoon for holding or pretreating wastewater, a construction permit may be required (Form MO 780-2189). If required, construction permit applications must be submitted 60 days before construction begins and must conform to the requirements listed in 10 CSR 20-6.010(5)(G).

Forms Needed for Discharge to Surface Water and Forms Needed for Land Application

- Form A MO 780-1479** – Application for Nondomestic Permit
- Form C MO 780-1514** – Application for Discharge Permit – Manufacturing, Commercial, Mining, and Silviculture Operations
- Form I MO 780-1686** – Permit Application for Operation of Wastewater Irrigation Systems
- Form MO 780-2189** – Application for Construction Permit – Wastewater Treatment Facility (only if constructing an earthen basin)

NPDES/MSOP Permit Application forms are available online at dnr.mo.gov/forms/#WaterPollution

Application Fees (Found in 10 CSR 20-6.011)

Anti-Degradation	\$500 (< 100K GPD) or \$1,000 (> 100K GPD)
Construction Permit	\$1,000 (< 500K GPD) or \$3,000 (≥ 500K GPD)
NPDES Permit Design Flow < 1 MGD	\$1,800 per year
NPDES Permit Design Flow > 1 MGD	\$3,000 per year

FOR MORE INFORMATION:

Contact the Water Protection Program’s Operating Permits Section, Missouri Department of Natural Resources, at **573-522-4502** or by email at **cleanwaterpermits@dnr.mo.gov**.

Nothing in this document may be used to implement any enforcement action or levy any penalty unless promulgated or authorized by statute.